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ABSTRACT

This paper reports an experimental evaluation of the effect of increased parental participation on the education of youngsters in a depressed area. There were four subject groups of children: 263 first graders in attendance during the 1966-67 school year, prior to the parent involvement program; 261 first graders attending during the experimental year of 1967-68, and 224 during 1968-69; and, 87 second graders in attendance during 1968-69. All were from the Wyandanch Public Schools. About five per cent of each class were Caucasian. An effort was made to get parents to visit the classrooms and to talk with the teachers, to assist the school with extra-curricular activities, and to be present at programs designed to provide information on the development and education of children. Analysis of the data collected indicates that the beneficial effect of enlisting parent participation in the education of their children in a depressed area on the latter's academic achievement will be discernible only after several years of concerted effort, and will not produce any large, immediate, educational improvement. (JM)

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District No. 9, Town of Babylon
Wyandanch Public Schools

July, 1969

Final Report

New York State Experimental and Innovative Programs
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Introduction

A. Statement of the Problem

Wyandanch has done much to improve instruction in the primary grades. The academic gains, however, have been less than would be expected from the effort expended. There were reasons for this situation. In some instances, the adults in the homes could not provide a background of experience and the assistance with school work that was needed. Some parents shied away from any contact with the school because of painful past experiences and a limited educational background which made anything related to schooling quite threatening. Other parents did not see the advantage that an enriched background and home assistance would give their youngsters. These parental attitudes were at least partially responsible for the behavior patterns, the inability to relate to adults, the meager experiential background, and the arrested or retarded language development of some children which made it impossible for the teacher to spend the major portion of each day on the curriculum of the grade, and for boys and girls to profit from what was presented to them.

If the school continues with so little assistance from many homes, each generation of youngsters will be only a little better off academically than their parents. It seemed, however, that the pace could be stepped up considerably if the parents could be encouraged to involve themselves in the education of their children.

Previous research sheds light on the home conditions that exist in the depressed areas and on the effect of varying degrees of parental participation.

Catherine Brunner, when studying children who live in pockets of poverty, discovered that:

> . . . there is in the home little encouragement for self concern on the part of the child or for the development of his personal interests. The desire to explore the environment and the tendency to raise questions are seldom fostered. The young child may be more comfortable with other children than with adults, since most of his relationships are likely to be with siblings and peers.
>
> The variety of the child's experiences may be so severely limited and their quality so poor that concepts related to many aspects of his environment are incomplete or inaccurate.
>
> . . . his language development may be arrested or retarded as a result of the paucity of his experiences, of his exposure to dialects and speech patterns which prevail in the environment, of his failure to receive a type of feedback which makes for speech correction and improvement, and of the influence of vague and indefinite language used by those with whom he communicates (Brunner, 1967, p. 150).

This retardation in language development handicaps considerably because "language is a socially conditioned relationship between the child's internal and external worlds. Once able to use words as mediators the child can effectively change his own social and material reality" (John and Goldstein, 1964, p. 273).

The child's problem is further compounded by the behavior patterns he develops. Tannenbaum explains that:

> The lower-class child is left to his own devices early in life without benefit of succorant care and disciplinary supervision at home. . . . In the absence of any clearly defined parental-role models to serve as an anchorage, he substitutes the values of the peer group and acquires a premature independence that is often rebellious and defiant rather than self-disciplined and goal directed (Tannenbaum, 1967, p. 53)

In school the teacher struggles to keep this child from disrupting the class and attempts to focus his attention on the lesson at hand. This emphasis on the following of rules and the acquisition of learning skills bring about in this child who is not at all prepared for such an environment a self-image of inadequacy (Tannenbaum, 1967, p. 55). This image further handicaps the child in a learning situation resulting in a vicious cycle that prevents academic advancement.

There is evidence that involving the parents in the educative process does result in academic advancement of the children. Ryan (1964) compared the reading achievement of second graders from homes with varying degrees of parental participation. The parents of his experimental group received a brochure Reading in Home, that gave guidance in encouraging children to read, and a Second Grade Bulletin four times during the year which reinforced the suggestions given in the brochure and informed the parents about the reading program. The control group received none of this material.

When the achievement in paragraph meaning and word meaning test scores for the experimental and control groups were compared, no significant differences were found for the paragraph meaning, but the experimental group was significantly superior on word meaning. It was concluded that the planned program of parental participation increased vocabulary and helped make reading an important leisure-time activity for the entire family.

Brzienski (1964) reported on the Denver pre-reading television program. Three groups of parents were organized. One received no instruction in the teaching of basic reading skills. Another was given instruction in teaching beginning reading through the use of a guidebook and television programs. The third used the guidebook and received help from teachers who used kinescopes of a television program and small-group discussions techniques.

A preliminary report of the findings indicated that the reading progress of the child was directly related to the amount of time spent at home with the practice materials. The minimum practice time necessary for statistically significant gains was thirty minutes a week. The reading to children was found to have a significant effect whether or not practice in beginning reading was given. Best performance was made by children who practiced reading more than thirty minutes a week and were read to more than an hour a week. A questionnaire to the parents indicated more help of this kind was desirable.

Before the program used in Denver was released nationally, station WENH-TV was asked to test the value of the program. McManus (1964) described the procedures and findings. Interested parents were asked to purchase the guidebook and watch the programs. One hundred fifty of the more than sixteen hundred parents who expressed an interest were enrolled for specialized participation (the experimental group). Another one hundred fifty parents living outside the television reception area formed the control group. The experimental group parents were asked to provide information on two questionnaires, one of which was before the television series and one after. These parents also attended meetings to hear lectures, to receive specialized materials, and to participate in group discussions. The control group parents filled out an informational questionnaire but participated in none of the other activities. The children of both experimental and control groups were given pre- and post-tests in reading achievement.

The youngsters in this study made considerable gains but the gains of the experimental group were markedly superior to those of the control group.

A random sampling of the questionnaires completed by the parents indicated that most frequently it was the mother who worked with the child.

This sampling of the literature indicates that in a depressed area the home background is apt to make adjustment to the school situation difficult and that in areas not classified as depressed involving the parents in the educative process does improve the achievement of the children. It would seem, then, that in a depressed area even greater gains could be expected if the parents' cooperation could be acquired.

B. <u>The Questions</u>

To test this hypothesis, that increased parental participation in the education of youngsters in a depressed area will improve academic achievement, the answers were sought to the following questions:

1. What percent of the parents can be encouraged to participate in the education of their children? Is this percent larger than it was for the 1967-68 experiment?

2. Will the children of parents who participated in the educative process obtain higher reading achievement test scores than children of comparable ability in the same class whose parents did not participate?

3. Will the second graders whose parents participated in group and individual meetings during 1967-68 achieve significantly higher than their classmates?

4. Will the first-grade achievement mean score for the 1968-69 class be any higher than that of the 1966-67 first grade when parental participation was not definitely sought?

5. Will the extent of parental participation for the 1968-69 first-grade class be related to reading achievement?

6. What will the correlation be between reading achievement of the first grade and each of the following measures: intelligence, parents' occupation, and parents' schooling for the 1967-68 first grade and for the 1968-69 first grade?

Methods and Procedures

A. Subjects

There were among the subjects four groups of children: those first graders (263) who were in attendance during the 1966-67 school year when no attempt was made to involve the parents in the education of their youngsters; first graders attending during the experimental years of 1967-68 (261) and 1968-69 (224); and second graders who were in attendance during 1968-69 (87). These second-grade boys and girls were the experimental first graders during the 1967-68 school year.

All the children involved were from the Wyandanch Public Schools. Only about five per cent of each class was Caucasian.

B. Treatment

An effort was made to get parents to visit the classrooms and to talk with the teachers; to attend teas and dramatic performances; to assist the school with class excursions, health examinations, and library activities; and to be present at programs designed to provide information on the development and education of children.

In the first year of the experiment, a teacher with a social work background acted as a liaison between the teachers of the first graders and the home. This teacher was responsible for editing a newsletter which was sent to parents once a month and which contained information on activities of the school, some children's writings, information on inexpensive trips a family could take, good books for children, etc. Along with this newsletter, a series of teas were given at which parents received information on school procedures and ways in which the home can assist youngsters with

school work. These meetings encouraged a few parents to become involved in the education of their children. The program, however, during the first year met with only partial success.

During the second year of the experiment, a steering committee of parents was added. This committee met practically every week to discuss programs for parents and ways in which attendance at school functions could be increased. At the beginning of the school year, this committee accepted the responsibility of contacting all the parents of the first and second graders. The community was divided into four sections. Parents focused attention on one area at a time until every school family in the project group had been visited. Parents were provided with information on meetings not only by letter and newspaper items but also by phone prior to activities.

C. Instruments

The Lorge-Thorndike Intelligence Tests, Level I; the Metropolitan Achievement Tests, Primary Battery I and Primary Battery II; a questionnaire to be completed by the teachers which gave information on the parents' occupational level, years of schooling, and number of contacts with the school, were the sources of the data for the statistical analyses.

D. Analysis

There were three basic groups in the study: the 1966-67 first graders whose test scores and other records served as control group data; the 1967-68 first graders (the first experimental group) who completed second grade in 1969; and the 1968-69 first graders (the second experimental group).

The proportion of parents of the 1969 subjects who participated in the education of their first graders was computed. Participation was defined as one or more voluntary contacts with the teacher by means of personal visit, telephone, home invitation or school meeting. The difference between the two proportions, of participation for the 1968 and 1969 groups, was tested for significance.

The 1969 first graders were separated into three groups: non-participants (no contacts), minor participants (1-4 contacts), and major participants (5 or more contacts). The significance of the differences between means was tested by single classification analyses of variance employing IQ and each of the four achievement variables as criteria.

The 1968 first graders, the first experimental group, were divided into three participation groups based on parental participation during the 1967-68 academic year. The second-grade achievement scores on the Metropolitan Primary II Battery for these subjects were employed as criterion variables in five single classification analyses of variance to test for significant mean differences between the participation groups.

The 1967, 1968, and 1969 first-grade groups were compared for mean differences in IQ and on each of the Metropolitan Primary I achievement scores by means of five single classification analyses of variance.

The correlations between each of the achievement scores and the following variables were computed for the 1969 first graders: IQ, parents' occupational level, father's education, and mother's education.

Each of the analyses and correlations included all subjects on whom the pertinent data were available.

Results

Of the 224 subjects in the 1969 first grade, 175 children had parents who made one or more contacts with the school. This constituted 78 per cent of the group. There were 518 reported contacts and the mean number of contacts for the 175 children was 3.0. The comparative data for the 1968 and 1969 groups are presented in Table 1. The proportion of the participants in the 1969 group was significantly higher than the proportion of the 1968 group ($P < .05$).

The 224 subjects in the 1969 group were divided into three groups--namely, nonparticipants (49), minor participants (152), and major participants (23). The comparison of these frequencies with those of the 1968 experimental group is presented in Table 2. The three participation groups of the 1969 subjects, when compared for significant differences on IQ and on achievement test scores, were significantly different on two of the five comparisons at the .05 level--namely, Word Knowledge and Word Discrimination. The means and variance analyses for the 1969 group are presented in Table 3. The mean IQ differences, though not significant ($P = .06$), might have accounted for some of the achievement variance.

The analyses of variance and the means of the scores of second-grade subjects who had participated in the 1968 phase of the study are presented in Table 4. The minor and major participation groups obtained significantly higher mean scores on the reading test when compared with the no-participation group. It should be noted, however, that these comparisons were made with only one-third of the original first-grade group.

The analyses of variance and mean scores for the 1967, 1968, and 1969 first-grade groups employing IQ and the four achievement variables as criterion scores are presented in Table 5. The data in Table 5 reveal rather clearly that the achievement and IQ means of the 1967 and 1969 groups are very similar in magnitude to each other and considerably larger than the corresponding means of the 1968 group.

The correlations of achievement with IQ, parents' occupational level, and education for the 1968 and 1969 groups are presented in Table 6. All of the correlations of IQ with achievement were significant beyond the .05 level. The correlations of IQ with achievement for the 1969 group were unusually low in three of the four instances. The other correlations in Table 6 were generally very low and consistent for both groups of subjects.

Discussion

A. Interpretation

The proportion of first-grade parents making voluntary contacts with the school during the 1968-69 academic year was significantly higher than during the 1967-68 year. The average number of contacts per participating parent was lower, however. Approximately three-fourths of the children had parents who made one or more contacts during 1968-69, whereas less than half of the children's parents participated during the 1967-68 year. There was considerably more involvement of parents in the planning and conduct of school activities during the second year. The very frequent --almost weekly--meetings of the parents' steering committee in planning sessions appeared to be an effective means of increasing overall interest and participation. The major change from 1967-68 to 1968-69 in the pattern of participation was the marked decrease in the "no contact" group and the sharp increase in the 1-4 contact category.

The relationship of parental participation to achievement as indicated by the 1968-69 data in this study would seem to be reasonable. In two of the four achievement comparisons the no-contact group scored significantly lower than the other groups. However, the measured IQ of the no-contact group was also lower than the other two, but the difference was not quite significant. Three points should be noted: 1) the 1967-68 data did not show the same pattern at all; 2) the cell sizes in the 1969 group were quite disparate; 3) the source of data on parental contacts in 1968 was the visiting teacher, whereas in 1969 the source was the classroom teacher. This latter fact was not anticipated as a cause of difference but its existence should be recognized. Since the first year of the program led to the conclusion that its effectiveness was not apparent in the achievement area and since the second year indicated that achievement may be affected, it becomes rather difficult to reach a clear conclusion.

The examination of the cumulative effect of the program by the comparison of second-grade achievement for the 1967-68 participation groups led to the conclusion that there was little discernable effect attributable to degree of parental participation in first grade. The reading scores did reveal a significant difference in the hypothesized direction, however, Although the second-graders' performance seemed almost as inconclusive as their performance at the end of first grade, the number of available scores for the analysis was drastically reduced. More than two-thirds of the original subjects were not represented in the second-grade analyses.

The comparison of the three successive first-grade groups from 1967 through 1969 gave rise to many questions. The initial intention was to examine the data for any gross differences in achievement which might be attributed to the parental participation. The exceptionally poor performance of the 1967-68 first grade on all measures is not readily explained. The large data losses for the 1969 groups on all measures (approximately 30%) and the large data loss in the IQ measure for the 1967 group generate numerous uncertainties about any conclusions. These data losses were due to absences, unavailable records, and shifts in

population and serve to emphasize the need for effective control of data collection and the difficulties of obtaining a large stable population in a depressed area. The IQ difference between the 1968 group and the other two groups is puzzling since prior involvement with successive classes in the same school had indicated that IQ's should have been equivalent. This discrepancy was also mentioned in the 1968 end-of-year report.

The correlations of achievement with IQ and of IQ with family background variables were not as large as might be expected and were generally negligible for the other measures. The sharp decrease in the correlations of IQ with achievement in 1969, coupled with the large number of missing IQ's and the higher 1969 IQ mean, indicate that perhaps the missing data were largely low scores or that the poor performers were not or could not be tested. This speculation could be examined but it was not relevant to the immediate purpose of the study and was merely noted to elucidate some of the problems of data validity.

B. Implications and Recommendations

1. Greater involvement of parents in the education of their children is possible if there is an active organized effort on the part of the school, which includes a major voice for the parents in structuring the program.

2. Present evidence indicates that the effects of enlisting parent participation in the education of their child in a depressed area will be discernible only after several years of concerted effort and will not produce any large, immediate educational improvement.

Those who expect to do research involving young children in a depressed area must take into consideration several factors when considering a sampling and a group of people with whom to work. These are:

(1) There may be considerable mobility of families.

(2) Some young children may not be testable.

(3) It is difficult to get teachers to see the importance of accurate or precise data.

(4) The absence rate is high and considerable time must be expended on make-up test and record completion.

TABLE 1

EXTENT OF PARTICIPATION OF 1968 AND 1969

FIRST-GRADE PARENTS

	1968	1969	Difference
Number of Contacts	631	518	-113
Number of Parents	120	175	+55
Proportion of Parents	.46	.78	+.32*
Mean No. of Contacts	5.2	3.0	-2.2
Number of Subjects	261	224	37

*Significant at .05 level

TABLE 2

FREQUENCY DISTRIBUTION OF NUMBER OF CONTACTS

1968 AND 1969

	None	1-4	5+	Total
1968	139	69	51	259
1969	49	152	23	224

TABLE 3

ANALYSES OF VARIANCE AND MEANS OF WORD KNOWLEDGE, WORD DISCRIMINATION, READING, ARITHMETIC, AND IQ FOR NON-PARTICIPANTS AND PARTICIPANTS

1968-69 FIRST GRADE

	VARIANCE				MEANS		
	df	Mean Square	F	p	Non-Participants	Minor Participants	Major Participants
Word Knowledge							
Between	2	.73			1.50	1.73	1.79
Within	158	.17	4.08	.05	(30)	(115)	(16)
Word Discrimination							
Between	2	1.55			1.51	1.85	1.94
Within	159	.28	5.42	.05	(30)	(116)	(16)
Reading							
Between	2	.01			1.66	1.68	1.65
Within	157	.15	.04	-	(28)	(116)	(16)
Arithmetic							
Between	2	.05			2.18	2.22	2.15
Within	151	1.06	.04	-	(25)	(113)	(16)
IQ							
Between	2	404.00			88.17	92.82	96.00
Within	150	141.52	2.85	-	(35)	(104)	(14)

TABLE 4

ANALYSES OF VARIANCE AND MEANS OF WORD KNOWLEDGE, WORD DISCRIMINATION, READING, SPELLING, AND ARITHMETIC FOR NON-PARTICIPANTS AND PARTICIPANTS

1968-69 SECOND GRADE

	VARIANCE				MEANS		
	df	Mean Square	F	p	Non-Participants	Minor Participants	Major Participants
Word Knowledge							
Between	2	.16			2.78	3.05	2.90
Within	84	.44	1.40	-	(47)	(24)	(16)
Word Discrimination							
Between	2	1.66			3.38	3.82	3.66
Within	84	.75	2.20	-	(47)	(24)	(16)
Reading							
Between	2	2.36			2.74	3.20	3.23
Within	83	.52	4.51	.05	(47)	(24)	(15)
Spelling							
Between	2	.39			3.25	3.47	3.24
Within	83	1.01	.39	-	(47)	(24)	(15)
Arithmetic							
Between	2	.32			2.89	3.09	2.90
Within	82	.37	.84	-	(46)	(24)	(15)

TABLE 5

ANALYSES OF VARIANCE AND MEANS OF WORD KNOWLEDGE, WORD DISCRIMINATION, READING, ARITHMETIC, AND IQ FOR 1967, 1968, AND 1969 FIRST GRADES

	VARIANCE				MEANS		
	df	Mean Square	F	p	1967	1968	1969
Word Knowledge							
Between	2	3.65			1.69	1.47	1.70
Within	666	.26	13.58	.05	(263)	(245)	(161)
Word Discrimination							
Between	2	1.91			1.78	1.63	1.80
Within	667	.42	4.46	.05	(263)	(245)	(162)
Reading							
Between	2	3.48			1.60	1.42	1.67
Within	650	.27	12.47	.05	(263)	(230)	(160)
Arithmetic							
Between	2	31.05			1.88	1.42	2.21
Within	659	.58	53.33	.05	(263)	(245)	(154)
IQ							
Between	2	3398.00			93.57	85.97	92.05
Within	569	197.85	17.17	.05	(184)	(235)	(153)

TABLE 6

CORRELATION OF ACHIEVEMENT WITH IQ, PARENTS' OCCUPATIONAL LEVEL, FATHER'S EDUCATION, AND MOTHER'S EDUCATION FOR 1968 AND 1969 EXPERIMENTAL GROUPS

		IQ	Occupational Level	Father's Education	Mother's Education
Word Knowledge	1968	.30	—.11	.13	.18
	1969	.28	.07	.21	.21
Word Discrimination	1968	.50	—.14	.10	.22
	1969	.26	.08	.16	.23
Reading	1968	.49	.09	.15	.16
	1969	.25	.10	.05	.08
Arithmetic	1968	.51	—.17	.11	.10
	1969	.18	.04	.10	.16

References

Brunner, Catherine. "Pre-school Experiences for the Disadvantaged," in P. Witty (ed.) The Educationally Retarded and Disadvantaged. The Sixty-Sixth Yearbook of the National Society for the Study of Education. Chicago, Ill.: The University of Chicago Press, 1967.

Brzeinski, J. E. "Beginning Reading in Denver." The Reading Teacher, Vol. 18, pp. 16-21, October, 1964.

John, Vera P. and Goldstein, L. S. "The Social Context of Language Acquisition." Papers from the Arden House Conference on Pre-School Enrichment. Detroit, Mich.: Merrill Palmer Institute, July, 1964.

McManus, Anastasia. "The Denver Pre-reading Project Conducted by WENH-TV." The Reading Teacher, Vol. 18, pp. 22-26, October, 1964.

Ryan, Elizabeth M. "A Comparative Study of the Reading Achievement of Second Grade Pupils in Programs Characterized by a Contrasting Degree of Parent Participation." (Unpublished Ph.D. dissertation, Indiana University, Bloomington, Indiana, 1964.)

Tannenbaum, A. J. Social and Psychological Considerations in the Study of the Socially Disadvantaged, The Sixty-Sixth Yearbook of the National Society for the Study of Education, Chicago, Ill.: The University of Chicago Press, 1967.